WHAT IS CLAIMED IS:

1. An anisotropic bending element comprising

at least one reinforcing layer I, each of which contains a fibrous reinforcing component I with a tensile modulus of elasticity in a range of from 1,800 to 20,000 N/mm^2; and

at least one elastomeric layer II, each of which contains an elastomer and has a tensile modulus of elasticity in a range of from 2 to 1,300 N/mm^2, wherein

a weight ratio in the bending element of the fibrous reinforcing component I to the elastomer is in a range of from 1:99 to 40:60; and

when the bending element is bent about an axis parallel to the reinforcing layer I, a ratio of a rigidity of the bending element in a positive direction of rotation relative to a rigidity of the bending element in a negative direction of rotation is 1: 1.2 or more.

2. The bending element as claimed in Claim 1, wherein the ratio of a rigidity of the bending element in a positive direction of rotation relative to a rigidity of the bending element in a negative direction of rotation is in a range of from 1:1.2 to 1:6.

3. The bending element as claimed in Claim 1, wherein the ratio of a rigidity of the bending element in a positive direction of rotation relative to a rigidity of the bending element in a negative direction of rotation is in a range of from 1:1.5 to 1:5.

4. The bending element as claimed in Claim 1, wherein the ratio of a rigidity of the bending element in a positive direction of rotation relative to a rigidity of the bending element in a negative direction of rotation is in a range of from 1:1.8 to 1:3.

5. The bending element as claimed in Claim 1, wherein the fibrous reinforcing component I comprises reinforcing fibers each having a diameter in a range of from 0.0001 mm to 2 mm.

6. The bending element as claimed in Claim 1, wherein the reinforcing fibers comprise a material selected from the group consisting of cotton, rayon, polyethylene terephthalate, polybutylene terephthalate, polyethylene, polypropylene, polyamide, aramid, polyacrylonitrile, carbon, boron, steel and glass.

7. The bending element as claimed in Claim 1, wherein elastomer comprises a material selected from the group consisting of an unvulcanized rubber, a vulcanized rubber and a thermoplastic elastomer.

8. The bending element as claimed in Claim 1, wherein

the elastomer comprises the unvulcanized rubber; and

the unvulcanized rubber comprises a material selected from the group consisting of styrene-butadiene rubbers, butadiene rubber, isoprene rubber, natural rubber, isobutene-isoprene rubber, nitrile rubber, chloroprene rubber, ethylene-propylene rubber (EPM), ethylene-propylene-diene rubber (EPDM) and mixtures thereof.

9. The bending element as claimed in Claim 1, wherein

the elastomer comprises the vulcanized rubber; and

the vulcanized rubber is produced by vulcanizing an unvulcanized rubber comprising a material selected from the group consisting of styrene-butadiene rubbers, butadiene rubber, isoprene rubber, natural rubber, isobutene-isoprene rubber, nitrile rubber, chloroprene rubber, ethylene-propylene rubber (EPM), ethylene-propylene-diene rubber (EPDM) and mixtures thereof.

10. The bending element as claimed in Claim 1, wherein

the elastomer comprises the thermoplastic elastomer; and

the thermoplastic elastomer comprises a material selected from the group consisting of polyether ester amides, polyether amides, polyether esters, mixtures of ethylene-propylene rubber (EPM) and a polyolefin, mixtures of ethylene-propylene-diene rubber (EPDM) and a polyolefin, styrene-butadiene block copolymers, thermoplastic polyurethanes and mixtures thereof .

11. The bending element as claimed in Claim 1, wherein each of the at least one elastomeric layer II adheres directly to one or more of the at least one reinforcing layer I.

12. The bending element as claimed in Claim 1, further comprising an adhesive layer between one of the at least one elastomeric layer II and one of the at least one reinforcing layer I.

13. The bending element as claimed in Claim 1, wherein

the at least one reinforcing layer I consists of a single reinforcing layer I; and

the at least one elastomeric layer II consists of a single elastomeric layer II.

14. The bending element as claimed in Claim 1, wherein

the at least one elastomeric layer II comprises two elastomeric layers II; and

the at least one reinforcing layer I comprises a reinforcing layer I between and arranged off-center of the two elastomeric layers II.

15. The bending element as claimed in Claim 1, wherein

the at least one reinforcing layer I comprises a first reinforcing layer I and a second reinforcing layer I;

the at least one elastomeric layer II comprises a first elastomeric layer II and a second elastomeric layer II; and

the first reinforcing layer I, the first elastomeric layer II, the second reinforcing layer I, and the second elastomeric layer II are arranged in this order in the bending element.

16. The bending element as claimed in Claim 1, wherein the bending element is part of a sports shoe insert.

17. The bending element as claimed in Claim 1, wherein the bending element is part of an item of sports equipment.

18. The bending element as claimed in Claim 1, wherein the bending element is part of a prosthesis.

19. A method of making an anisotropic bending element, the method comprising

laminating at least one reinforcing layer I and at least one elastomeric layer II; and

producing the bending element of Claim 1.

20. A method of using an anisotropic bending element, the method comprising bending the bending element of Claim 1 about an axis parallel to the at least one reinforcing layer I both in a positive direction of rotation and in a negative direction of rotation.